

COMPUTERS & EDUCATION: ARTIFICIAL INTELLIGENCE

AUTHOR INFORMATION PACK

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DESCRIPTION

Computers & Education: Artificial Intelligence aims at affording a world-wide platform for researchers, developers, and educators to present their research studies, exchange new ideas, and demonstrate novel systems and pedagogical innovations on the research topics in relation to applications of artificial intelligence (AI) in education and AI education. A sister journal to Computers & Education, CAEAI is an open access and peer reviewed journal, which welcomes empirical, review, and position papers from the following areas. AI-assisted tutoring for decision-making AI-based multimedia data analytics in classroom or school settings AI-enabled learning environment designing educational technologies in the age of AI ethical issues and problems raised by AI applications in education how to apply AI techniques and models in analyzing the educational data how to develop AI-based e-learning systems innovative strategies and systems for AI education intelligent tutoring and learning systems learning behavioral and cognitive analysis for intelligent systems learning emotion detection using AI learning emotion and classroom dialogue analysis using AI personalized and intelligent educational systems pedagogical innovations for AI teaching and learning research trends in AI for education research

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GUIDE FOR AUTHORS

INTRODUCTION

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Strunk, W., Jr., & White, E. B. (2000). *The elements of style* (4th ed.). Longman (Chapter 4). Reference to a chapter in an edited book:

Mettam, G. R., & Adams, L. B. (2009). How to prepare an electronic version of your article. In B. S. Jones, & R. Z. Smith (Eds.), *Introduction to the electronic age* (pp. 281–304). E-Publishing Inc. Reference to a website:

Powertech Systems. (2015). *Lithium-ion vs lead-acid cost analysis*. Retrieved from http://www.powertechsystems.eu/home/tech-corner/lithium-ion-vs-lead-acid-cost-analysis/. Accessed January 6, 2016

Reference to a dataset:

[dataset] Oguro, M., Imahiro, S., Saito, S., & Nakashizuka, T. (2015). *Mortality data for Japanese oak wilt disease and surrounding forest compositions*. Mendeley Data, v1. https://doi.org/10.17632/xwj98nb39r.1.

Reference to a conference paper or poster presentation:

Engle, E.K., Cash, T.F., & Jarry, J.L. (2009, November). *The Body Image Behaviours Inventory-3: Development and validation of the Body Image Compulsive Actions and Body Image Avoidance Scales*. Poster session presentation at the meeting of the Association for Behavioural and Cognitive Therapies, New York, NY.

Reference to software:

Coon, E., Berndt, M., Jan, A., Svyatsky, D., Atchley, A., Kikinzon, E., Harp, D., Manzini, G., Shelef, E., Lipnikov, K., Garimella, R., Xu, C., Moulton, D., Karra, S., Painter, S., Jafarov, E., & Molins, S. (2020, March 25). *Advanced Terrestrial Simulator (ATS) v0.88 (Version 0.88)*. Zenodo. https://doi.org/10.5281/zenodo.3727209.

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